

Amendments to the Specification

On page 5, please replace the second full paragraph beginning with “FIG. 1 shows” with the following paragraph:

FIG. 1 shows a typical example of a wafer prober 20 usable in connection with the present invention. Tester 20 typically includes an access opening 21 for mounting the probe card inside the tester. Control panel 22 allows for operator control of the testing process. Semiconductor ~~wafers~~ wafers are also loaded into the wafer prober 20, often times in a “boat” or cassette which allows several wafers to be held for testing sequentially by contact with the probe card.

On page 6, please replace the first full paragraph beginning with “FIGS. 3A – 3F are” with the following paragraph:

FIGS. 3A – 3F are but one example of the present invention. Referring to FIG. 3A, this drawing illustrates the inside of tester 20. Therein, probe card PC is mounted in the tester parallel to the die on a wafer (integrated circuit IC), and most typically positioned directly above it. The probe card has electrical contacts, such as contact 11, as known in the industry. For example, such contacts are generally the type disclosed in U.S. Patent Nos. 6,184,053 B1; 5,974,662; and 5,917,707 which are hereby incorporated by reference. Other contacts known in the industry may be included in any embodiment of the probe cards of the present invention. Typically, the probe card is connected to the testing machine by other electrical contacts, as diagrammatically illustrated with test head 23 directly connected with connections 24 to the probe card PC. Wafer chuck 25 ~~including~~ includes table actuator 26 to lift the integrated circuit IC vertically in the Z-axis direction (see FIGS. 3E, 3F) to

allow electronic contact between contacts 11 and a pad (such as pad 11a) of integrated circuit IC forming contact points.

On page 7 and continuing on page 8, please replace the paragraph beginning with “FIGS. 4A and 4B disclose” with the following paragraph:

FIGS. 4A and 4B disclose an alternative embodiment utilizing cover 310 on probe card PC. As illustrated, arms 317 and 318 swivel in a position along the X-axis (and the Y-axis) through arcuate movement under the electrical contacts 311 of the probe card (FIG. 4A). As part of this, there is also vertical movement to have holder 316 engage or otherwise hold cover 310 by mechanical robotic action, such as telescoping action, rack gear, or otherwise. The holder is withdrawn in the vertical Z-axis retracted away from the probe card as illustrated in FIG. 4B. The probe card, ~~which~~ is held within the tester 20 by mounts such as 320a, 320b, 320c, and 320d in the testing machine.

On page 8, please replace the first full paragraph beginning with “Referring to FIGS. 5A, 5B, 5C, 5D AND 5E” with the following paragraph:

Referring to FIGS. 5A, 5B, 5C, 5D and 5E, these drawings show an alternative arrangement of the present invention sequentially inside testing device 20. Probe card PC is mounted in mounts 420a, 420b, 420c and 420d in the tester. Electrical contacts, such as contacts 411 are oriented downwardly in a Z-axis direction along the bottom surface of the probe card which ordinarily is flat planar surface. Holder 415 is provided on the carriage mechanism along guide rails 417. Casters 418 or other low friction engagement with guide 417 are provided to allow movement from a first position (FIG. 5A) to a second position (FIG. 5B) along guide 417. Typically, guides 417 comprise a pair of such guides in parallel

arrangement spaced far enough apart in the Y-axis direction (in and out of the page) such that when the cover is removed (FIG. 5E) the guides 417 do not interfere with the upward movement of the table and integrated circuit (of the type shown as table 25 in FIG. 3E) to allow for testing of the integrated circuit. As shown in FIG. 5C, holder 415 preferably is moved in position, preferably with vertical movement in the Z-axis so that holder elements 416 grab any one of a number of mechanical and/or other mechanisms to hold cover 410. As illustrated in FIG. 5C, such lifting mechanism may have a scissor mechanism 419, although telescoping action, lever action, thread action, cam action and other lifting mechanisms may be used. Such lifting mechanism, as with the other movements in the other embodiments, may be actuated by a variety of mechanisms such as pneumatics, stepper motors, servo motors or other electrical motors or otherwise. For example, lever In addition, the carriage mechanism with holder 415 and scissor mechanism 419 can be moved along guide 417 by such means as well.

On page 9 and continuing on page 10, please replace the paragraph beginning with “Moreover, another optional feature” with the following paragraph:

Moreover, another optional feature with such approach is to have cover 510 retractable in the Z-axis. This may be accomplished in a number of ways, one of which is illustrated, it being understood that other approaches are within the present invention as well. For example, with reference to FIGS. 6C and 6D, once cover 510 is moved to the second position (slid to the far right in the drawing figures), then support struts 531 and 532 may be mechanically lifted upward once boss 533 and boss 534 are in alignment with corresponding openings, such as opening 518. Such bosses maintain cover 510 clear of contacts 511 while the cover is in the first position. Yet, the openings, such as opening 518,

allow the bosses to pass there through in a Z-axis direction. Accordingly, as illustrated in the phantom lines of FIGS. 6D showing the retracted position, the Z-axis thickness of cover 510 is preferably less than the Z-axis height of the electrical contacts. Retracting the cover out of the way of the contacts avoids interference when the contacts electronically engage the integrated circuit to be tested. It should be noted that alternative arrangements of sliding cover 510 may be provided. For example, although FIG. 6A – 6D illustrate a single sliding cover, this may be modified to have two or more sliding covers. For example, there may be two sliding covers, a left-half cover and a right-half cover with each of them moving between a first position (covering the electrical contacts) and the second position (exposing the electrical contacts) in which the two cover halves move in opposite directions. Other mechanisms may be provided ~~which~~ where more than two cover components move to expose the contacts by movement in radiating directions away from the electrical contacts.

On page 11, please replace the first full paragraph beginning with “Referring to FIGS. 8A and 8B” with the following paragraph:

Referring to FIGS. 8A and 8B, an alternative arrangement is illustrated in which cover 710 comprises two cover halves, 710a and 710b. The cover halves have a hinge mechanism, such as hinge mechanism ~~612~~712. The cover halves move between a first closed position (FIG. 8A) and a second open position (FIG. 8B). In the open position, contacts 711 of the probe card PC are exposed for engagement and testing of an integrated circuit. Actuation of the cover halves 710a and 710b may be from a variety of mechanisms, such as a robotic arm, mechanical and/or magnetic engagement with the cover halves. Similarly, the cover halves may be held open by mechanical engagement with a lever arm, detent mechanism or magnet holder or otherwise.